

Claims

1. An integrated radio telephone structure, which radio telephone comprises an audio amplifier and at least one planar element for both a first and a second function, said planar element belonging to an antenna in the radio telephone and the second function being periodic moving of said planar element, for which the structure comprises a piezoelectric element attached to said planar element.
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2. A structure according to claim 1, said piezoelectric element being coupled to an audio amplifier output, whereby said periodic moving of the planar element is generation of sound.
- 10 3. A structure according to claim 2, where a radiating plane of said antenna has a first branch and a second branch to produce two bands, said planar element being the first branch of the radiating plane.
4. A structure according to claim 3, further comprising a second piezoelectric element which is attached to the second branch of the radiating plane.
- 15 5. A structure according to claim 1, where said antenna comprises a separate ground plane, said planar element being the ground plane.
6. A structure according to claim 5, said piezoelectric element being attached to the ground plane at a first fixedly-supported end thereof, and the structure further comprises a second piezoelectric element which is attached to the ground plane at a
20 second fixedly-supported end thereof.
7. A structure according to claim 1, in which the radio telephone comprises a vibration oscillator, a piezoelectric element being coupled to the vibration oscillator, whereby said periodic moving of the planar element is generation of alarm vibration.
- 25 8. A structure according to claim 7, where a radiating plane of said antenna has a first branch and a second branch to produce two bands, and the structure comprises a first and a second piezoelectric element, the first piezoelectric element being attached to the first branch of the radiating plane and said piezoelectric element coupled to the vibration oscillator being the second piezoelectric element, which is attached to the second branch of the radiating plane.
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9. A structure according to claim 1, said periodic moving of the planar element being caused by sound waves coming from outside, whereby the aim of said piezoelectric element is to generate an electric signal corresponding to the sound waves.
- 5 10. A structure according to claim 1, said piezoelectric element being made of a ceramic material.